

Notice of Allowability

Application No.

10/523,234

Examiner

Nicholas S. Ulrich

Applicant(s)

NAKAMURA ET AL.

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/05/2007.
2. ☒ The allowed claim(s) is/are 13,15-17,19-21,23 and 24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 20070319
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. This office action is in response to the Applicants amendment submitted on 1/05/2007.
2. The Information Disclosure Statements filed 10/23/2006 and 2/27/2007 have been considered by the examiner.
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Yi on 3/19/2007.

The application has been amended as follows:

In the **Claims**, Please Enter the Attached Amendment.

REASONS FOR ALLOWANCE

4. Claims 13, 15-17, 19-21, and 23-24 are allowed and claims 1-12, 14, 18, and 22 have been canceled.

The following is an examiner's statement of reasons for allowance: The Examiner has carefully considered all the claims 1-24.

The current invention is directed to a method, system, and program for displaying a web page on a small screen device.

Independent claims 13, 17, and 21, recite acquiring a first web page including display elements; identifying a headline and a story body in the first web page by: creating an internal depiction of the first web page, computing positions of the display elements based on the internal depiction, classifying closely related display elements together as clusters based on the computed positions of the display elements, discriminating a cluster of headlines and story bodies from other clusters by determining a center-of-gravity line which is a vertical line that crosses the largest number of display elements in the internal depiction and judging clusters as one of left, right, or middle in reference to the center-of-gravity line wherein the cluster of headlines and story bodies is middle with respect to the other clusters, forming groups, a group including clusters having the same character attributes, calculating an average number of characters per cluster for each of the groups, and determining the headline and the story body, wherein the group having a low average is the headline and a group having a high average is the story body.; creating a second web page including the story body from the first web page; and creating a third web page including the headline from the first web page, wherein the headline in the third web page is a link to the second web page containing the story body.

One of the prior art of records, Chen et al. (US 2003/010123 A1) teaches presenting web pages on small screen devices. In regard to claims 13, 17 and 21, Chen teaches acquiring a first web page including display elements; identifying a

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headline and a story body in the first web page by: computing positions of the display elements based on the internal depiction, classifying closely related display elements together as clusters based on the computed positions of the display elements.; creating a second web page including the story body from the first web page; and creating a third web page including the headline from the first web page, wherein the headline in the third web page is a link to the second web page containing the story body.

However, Chen fails to teach discriminating a cluster of headlines and story bodies from other clusters by determining a center-of-gravity line which is a vertical line that crosses the largest number of display elements in the internal depiction and judging clusters as one of left, right, or middle in reference to the center-of-gravity line wherein the cluster of headlines and story bodies is middle with respect to the other clusters, forming groups, a group including clusters having the same character attributes, calculating an average number of characters per cluster for each of the groups, and determining the headline and the story body, wherein the group having a low average is the headline and a group having a high average is the story body.

Another prior art of record, Nakatsuka et al. (US 6125204), teaches identifying positions and attributes of documents including determining a headline of the document.

However, Nakatsuka fails to explicitly disclose any of the limitations of claims 13, 17, or 21.

Thus, the prior art of record neither render nor anticipate the claimed invention. Therefore, all pending claims 13, 15-17, 19-21, and 23-24 are allowed.


Conclusion

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas S. Ulrich whose telephone number is 571-270-1397. The examiner can normally be reached on M-TH 9:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas Ulrich
2173
3/19/2007



TADESSE HAILU
Patent Examiner

LAW OFFICES
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.
901 New York Avenue, NW
Washington, DC 20001

Telephone
(202) 408-4000

Facsimile
(202) 408-4400

FACSIMILE TRANSMITTAL

Subject: Application No. 10/523,234
Client/Matter No.: 09812.0214-00000
Sony Reference: S04P0699US00

Date: March 19, 2007
Submitted by: Peter Yi

TO

Name: Nicholas S. Ulrich
Firm: USPTO
Fax No.: 571-270-2397
Phone No.: 571-270-1397

FROM

Name: Michael R. Kelly/Peter Yi
Phone No.: 202-408-4063
Approved:
Pages (incl. this): 6

Confirmation Copy to Follow: No

Message:

Please see the attached claim amendments in accordance with our telephone conversation on March 16 and March 19, 2007.

If you have any questions or comments, please call Peter Yi at 202-408-4485.

If there is a problem with this transmission, notify fax room at (202) 408-4174 or the sender at the number above.

This facsimile is intended only for the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If you have received this facsimile in error, please notify the sender immediately by telephone (collect), and return the original message by first-class mail to the above address.

DRAFT CLAIM AMENDMENTS:

1-12. (Cancelled).

13. (Currently Amended) A web page processing method comprising:

acquiring a first web page including display elements;

identifying a headline and a story body in the first web page by

creating an internal depiction of the first web page;

computing positions of the display elements based the internal depiction;

classifying closely related display elements together as clusters based on
the computed positions of the display elements;

discriminating a cluster of headlines and story bodies from other clusters
by determining a center-of-gravity line which is a vertical line that crosses the largest
number of display elements in the internal depiction and judging clusters as one of left,
right, or middle in reference to the center-of-gravity line, wherein the cluster of headlines
and story bodies is middle with respect to the other clusters;

forming groups, a group including clusters having the same character
attributes;

calculating an average number of characters per cluster for each of the
groups; and

determining the headline and the story body, wherein a group having a
low average is the headline and a group having a high average is the story body;

creating a second web page including the story body from the first web page; and

creating a third web page including the headline from the first web page, wherein the headline in the third web page is a link to the second web page containing the story body.

14. (Canceled).

15. (Previous Presented) The web page processing method of claim 13, wherein the story body contains a list of links to articles belonging to the headline.

16. (Previous Presented) The web page processing method of claim 13 further comprising displaying the second web page and the third web page.

17. (Currently Amended) A web-compatible electronic device comprising:
means for acquiring a first web page including display elements;
means for identifying a headline and a story body in the first web page
comprising:
means for creating an internal depiction of the first web page;
means for computing positions of the display elements based the internal
depiction;
means for classifying closely related display elements together as clusters
based on the computed positions of the display elements;
means for discriminating a cluster of headlines and story bodies from
other clusters by determining a center-of-gravity line which is a vertical line that crosses

the largest number of display elements in the internal depiction and judging clusters as one of left, right, or middle in reference to the center-of-gravity line, wherein the cluster of headlines and story bodies is middle with respect to the other clusters;

means for forming groups, a group including clusters having the same character attributes;

means for calculating an average number of characters per cluster for each of the groups; and

means for determining the headline and the story body, wherein a group having a low average is the headline and a group having a high average is the story body;

means for creating a second web page including the story body from the first web page; and

means for creating a third web page including the headline from the first web page, wherein the headline in the third web page is a link to the second web page containing the story body.

18. (Canceled).

19. (Previous Presented) The web-compatible electronic device of claim 17, wherein the story body contains a list of links to articles belonging to the headline.

20. (Previous Presented) The web-compatible electronic device of claim 17 further comprising means for displaying the second web page and the third web page.

21. (Currently Amended) A computer readable medium having a computer program for executing a web page processing method, the method comprising:

- acquiring a first web page including display elements;
- identifying a headline and a story body in the first web page by
 - creating an internal depiction of the first web page;
 - computing positions of the display elements based the internal depiction;
 - classifying closely related display elements together as clusters based on the computed positions of the display elements;
 - discriminating a cluster of headlines and story bodies from other clusters by determining a center-of-gravity line which is a vertical line that crosses the largest number of display elements in the internal depiction and judging clusters as one of left, right, or middle in reference to the center-of-gravity line, wherein the cluster of headlines and story bodies is middle with respect to the other clusters;
 - forming groups, a group including clusters having the same character attributes;
 - calculating an average number of characters per cluster for each of the groups; and
 - determining the headline and the story body, wherein a group having a low average is the headline and a group having a high average is the story body;
- creating a second web page including the story body from the first web page; and

creating a third web page including the headline from the first web page, wherein the headline in the third web page is a link to the second web page containing the story body.

22. (Canceled).

23. (Previous Presented) The computer readable medium of claim 21, wherein the story body contains a list of links to articles belonging to the headline.

24. (Previous Presented) The computer readable medium of claim 21, wherein the method further comprises displaying the second web page and the third web page.